

Amendments To the Claims:

Please amend the claims as shown.

1.-31. (cancelled)

32. (new) A method for manufacture of a main body made of a nickel- or cobalt-based superalloy parent material comprising:

determining an area of corrosion on the main body by an eddy-current measurement using at least two different measuring frequencies to ascertain the thickness of the corroded areas,

wherein the at least two different measuring frequencies include a low frequency used first and a high frequency used subsequently,

wherein the depth of the area of corrosion (δ) determined using eddy-current testing is determined in relation to the measuring frequency (f),

wherein the area of corrosion is oxidated carbide corrosion or sulfidized corrosion;

removing the corrosion area by cleaning the main body using a first cleaning process and a second cleaning process different from the first cleaning process,

wherein the first cleaning process is a grinding process and the second cleaning process is a sputter process;

activating the surface of the main body for an application of an anti-corrosive coating;
and

applying the anti-corrosive coating.

33. (new) The method in accordance with claim 32 wherein the depth of the area of corrosion (δ) determined using eddy-current testing is determined in correlation to the measuring frequency (f) by the equation $\delta = 503/(\sqrt{f \cdot \sigma \cdot \mu_r})$, where σ is the specific conductivity of the parent material and μ_r is the relative permeability of the parent material.

34. (new) The method in accordance with claim 33, further including providing the results of the eddy-current measurement to an evaluation unit.

35. (new) The method in accordance with claim 33, wherein the main body is a gas turbine component.

36. (new) A method for the manufacture of a gas turbine blade with a cast main body of a nickel or cobalt based superalloy parent material, comprising:

testing a surface of the main body for the presence of a corrosion area of oxidated carbides or sulfidized parent material areas using eddy-current testing,

wherein the depth of the area of corrosion (δ) determined using eddy-current testing is determined in relation to the measuring frequency (f),

removing oxide areas of oxidated carbides or sulfidized areas by cleaning the surface of the main body using a first cleaning process effective to remove the oxidated carbides or sulfidized parent material areas;

performing a second cleaning process different than the first cleaning process, the second cleaning process being ineffective for removing the corrosion area in the absence of the first cleaning process;

activating the surface of the main body for an application of an anti-corrosive coating;
and

applying an anti-corrosive coating.

37. (new) The method in accordance with claim 36, wherein

wherein the depth of the area of corrosion (δ) determined using eddy-current testing is correlated to the measuring frequency (f) by the equation $\delta = 503/(\sqrt{f \cdot \sigma \cdot \mu_r})$, where σ is specific conductivity of the parent material and μ_r is relative permeability of the parent material.

38. (new) The method in accordance with claim 37, wherein the anti-corrosive coating is a MCrAlY type of alloy, wherein M being selected from the (Fe, Co, Ni) group, Cr = chrome, Al = aluminum and Y from the (Y, rare earths) group.